



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/931,034	08/17/2001	Paul Grady Russell	10013958-1	2684

7590 03/25/2005

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

HASHEM, LISA

ART UNIT	PAPER NUMBER
----------	--------------

2645

DATE MAILED: 03/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/931,034

Applicant(s)

RUSSELL ET AL.

Examiner

Lisa Hashem

Art Unit

2645

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 5 recites the limitation "the GPS receiver". There is insufficient antecedent basis for this limitation in the claim.
3. Claim 12 recites the limitation "the wireless receiver". There is insufficient antecedent basis for this limitation in the claim. Examiner assumes this to be the second wireless transceiver.
4. Claims 10, 17, and 20 recite the limitation "the user's ears". There is insufficient antecedent basis for this limitation in these claims.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 18 and 20 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by U.S. Patent No. 6,157,298 by Garfinkel et al, hereinafter Garfinkel.

Regarding claim 18, Garfinkel discloses a helmet (see Fig. 1, 10), comprising: a protective portion for protecting a wearer's head (col. 1, line 63 – col. 2, line 4 and lines 20-30); a housing (Fig. 1, 11) (col. 5, lines 1-6); a receiver or antenna (Fig. 1, 21) for receiving a wireless

Art Unit: 2645

signal to form a received signal, said receiver positioned in said housing (col. 5, line 7 – col. 5, line 24); processor or electrical connections (circuitry located in the electronics module in Fig. 1, 11) inherently coupled with said receiver for converting the received signal into an audio signal (col. 2, lines 13-17; col. 5, lines 14-17); and one or more speakers or earphone assembly (the earphone assembly produces sound so the wearer can hear) (Fig. 1, 24) inherently coupled with said processor (wherein the transceiver housed in the electronics module (Fig. 1, 11) is electrically connected to the communications module (Fig. 1, 22) that includes the earphone assembly (Fig. 1, 24); col. 4, line 63 – col. 5, line 21), said one or more speakers converting the audio signal into an audible signal for the wearer (col. 5, lines 17-28).

Regarding claim 20, the helmet of claim 18 mentioned above, wherein Garfinkel further discloses the one or more speakers (earphone assembly; Fig. 1, 24) are positioned near (proximate) the wearer's ears without the one or more speakers contacting the wearer's ears (col. 5, lines 17-28).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 2, 8-11, and 12-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,157,298 by Garfinkel in view of U.S. Patent No. 5,823,557 by Penza.

Regarding claim 1, Garfinkel discloses a portable entertainment system for use with a bicycle and a helmet (Fig. 1, 10) (see Abstract), comprising: a wireless transmitter or remote

Art Unit: 2645

transmitter, the wireless transmitter inherently transmitting a digitized audio signal (col. 2, lines 51-55; col. 5, lines 14-24); a wireless receiver or antenna (Fig. 1, 21) positioned on the helmet, the wireless receiver receiving the digitized audio signal from the wireless transmitter (col. 2, lines 51-55; col. 5, lines 14-24); processor or electrical connections (circuitry located in the electronics module in Fig. 1, 11) inherently coupled with the wireless receiver, the processor converting the digitized audio signal to an analog audio signal (col. 2, lines 13-17; col. 5, lines 14-24); and one or more speaker ear cones or earphone assembly (the earphone assembly produces sound so the wearer can hear) (Fig. 1, 24) positioned on the helmet, the one or more speaker ear cones inherently connected with the processor (wherein the transceiver housed in the electronics module (Fig. 1, 11) is electrically connected to the communications module (Fig. 1, 22) that includes the earphone assembly (Fig. 1, 24); col. 4, line 63 – col. 5, line 21) for creating an audible audio signal from the analog audio signal (col. 5, lines 17-28).

Garfinkel does not disclose a mounting device and portable computing device positionable in a port of the mounting device connected to the bicycle, wherein the helmet receives audio from the portable computing device. However, Garfinkel teaches the helmet can communicate with a remote transmitter to receive audio signals and the helmet can receive signals from the AM/FM radio in the helmet via the antenna (see Abstract; col. 2, lines 5-9; col. 5, lines 14-24).

Penza discloses a portable entertainment system for use with a bicycle (Fig. 1, 12), comprising: a mounting device or platform having at least one port or jack, the mounting device adapted to connect to the bicycle (see Abstract); a portable computing device or portable music

Art Unit: 2645

player positionable in the at least one port, the portable computing device plays a digitized audio file (col. 3, lines 44-60; col. 3, line 65 – col. 4, line 2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Garfinkel to include a mounting device having at least one port, the mounting device adapted to connect to the bicycle and a portable computer device (portable music player) positionable in said port as taught by Penza. One of ordinary skill in the art would have been lead to make such a modification to mount the remote transmitter onto the bicycle and couple it to the portable music player to communicate digitized audio files to the helmet so as not to disturb nearby individuals and provide wireless communication between the portable music player and the helmet.

Regarding claim 2, the system of claim 1 mentioned above, wherein Penza further discloses the mounting device includes a protective covering or door (Fig. 9, 84) over the portable computing device (col. 3, lines 44-60; col. 3, line 65 – col. 4, line 2).

Regarding claim 8, the system of claim 1 mentioned above, wherein Garfinkel further discloses the wireless transmitter inherently transmits the digitized audio signal as an infrared signal (col. 2, lines 51-55; col. 5, lines 14-24).

Regarding claim 9, the system of claim 1 mentioned above, wherein Garfinkel further discloses the wireless transmitter inherently transmits the digitized audio signal as a digital radio signal (col. 2, lines 51-55; col. 5, lines 14-24).

Regarding claim 10, the system of claim 1 mentioned above, wherein Garfinkel further discloses the one or more speaker ear cones (the earphone assembly produces sound so the

wearer can hear) (Fig. 1, 24) are positioned on the helmet near (proximate) a user's ears without the one or more speaker ear cones contacting the user's ears (col. 5, lines 17-21).

Regarding claim 11, the system of claim 1 mentioned above, wherein Garfinkel further discloses the wireless receiver is positioned on the rear end of the helmet to receive the digitized audio signal from the wireless transmitter (Figure 1, 21; col. 2, lines 51-55).

Garfinkel in view of Penza do not disclose the wireless receiver is positioned about a front portion of the helmet.

Garfinkel discloses a front of the outer shell of the helmet comprises a headlight to illuminate dark areas in the user's field of vision (col. 1, lines 57-62; col. 2, lines 9-13). The wireless receiver is positioned along the rear portion of the outer shell because that is larger than the front portion in order to accommodate said receiver.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Garfinkel in view of Penza to include the wireless receiver positioned about a front portion of the helmet to accommodate signal transmission. One of ordinary skill in the art would have been lead to make such a modification if the helmet did not include a headlight to illuminate a user's vision as disclosed in Garfinkel.

Regarding claim 12, please see the rejection of claim 1 above, to reject claim 12. Wherein the first wireless transceiver is the remote transmitter/receiver in Garfinkel and the second wireless transceiver is antenna in Garfinkel.

Regarding claim 13, the system of claim 12 mentioned above, wherein Garfinkel further discloses: a microphone (Fig. 1, 23) coupled with the processor or electrical connections

Art Unit: 2645

(circuitry located in the electronics module in Fig. 1, 11) for receiving voice audio from a user of the helmet (col. 5, lines 7-14).

Regarding claim 14, the system of claim 13 mentioned above, wherein Garfinkel further discloses the processor converts the voice audio from the microphone to a digitized voice signal, and the processor passes the digitized voice signal to the second transceiver (antenna) for transmission to the first transceiver or remote receiver (col. 5, lines 7-17).

Regarding claim 15, the system of claim 14 mentioned above, wherein Garfinkel further discloses the digitized voice signal is received by the first transceiver and is inherently converted into a control signal (col. 5, lines 7-17).

Regarding claims 16, 21, and 22, please see the rejection of claim 1 above to reject claims 16, 21, and 22.

Regarding claim 17, the method of claim 16 mentioned above, wherein Garfinkel further discloses positioning the one or more speaker ear cones (earphone assembly; Fig. 1, 24) near (proximate) a user's ears without the one or more speakers contacting the user's ears (col. 5, lines 17-28).

Regarding claim 20, please see the rejection to claim 17 above, to reject claim 20.

9. Claims 3-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garfinkel in view Penza, as applied to claim 1 mentioned above, and further in view of U.S. Patent No. 6,463,385 by Fry.

Regarding claim 3, the system of claim 1 mentioned above, wherein Garfinkel in view of Penza do not disclose the mounting device includes two ports, and the system further comprises: a GPS receiver positionable in one of the two ports, the GPS receiver providing position data.

Fry discloses a portable information system for use with a bicycle (Fig. 1, 100), comprising: a mounting device or bicycle computer having at least one port (Fig. 2, 230), the mounting device adapted to connect to the bicycle (see Fig. 1; col. 3, lines 53-64); a portable computing device or portable laptop computer positionable in the at least one port, the portable computing device provides a digitized information (col. 3, lines 5-15; col. 5, lines 33-39). Wherein, Fry further discloses the mounting device includes two ports, and the system further comprises: a GPS receiver inherently positionable in one of the two ports (Fig. 2, 210), the GPS receiver providing position data (col. 2, lines 45-58; col. 5, lines 19-23).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Garfinkel in view of Penza to include 2 ports and a GPS receiver, as per the teachings of Fry. One of ordinary skill in the art would have been lead to make such a modification since the portable entertainment system of Garfinkel in view of Penza can include a second port to enable another component, such as a GPS receiver, to provide positioning data for a user traveling on the bicycle.

Regarding claim 4, the system of claim 3 mentioned above, wherein Fry further discloses the portable computing device or portable laptop computer is coupled with the GPS receiver to receive and process the position data (col. 3, lines 5-15; col. 5, lines 19-39; col. 6, lines 27-33).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Garfinkel in view of Penza to include a portable computing device such as a laptop computer, as per the teachings of Fry. One of ordinary skill in the art would have been lead to make such a modification since the portable entertainment system of

Art Unit: 2645

Garfinkel in view of Penza can include portable laptop computer to analyze data from the GPS receiver.

Regarding claim 5, the system of claim 1, wherein please see the rejections of claims 3-4 above to reject claim 5. Fry further discloses the mounting device inherently includes a back plane (signal lines and controller) connecting one or more signals from the GPS receiver with the portable computing device (see Fig. 2; col. 4, line 62 – col. 5, line 39).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Garfinkel in view of Penza to include a back plane, as per the teachings of Fry. One of ordinary skill in the art would have been lead to make such a modification since the portable entertainment system of Garfinkel in view of Penza can include a back plane to route signals between the GPS receiver with the portable computing device.

Regarding claim 6, the system of claim 1 mentioned above, wherein Garfinkel further discloses the helmet comprises means for cellular phone communications providing a phone audio signal to a user of the helmet (col. 2, lines 5-9; col. 5, lines 22-24).

Garfinkel in view of Penza do not disclose the mounting device includes two ports. However, Garfinkel discloses that the helmet can communicate with a cellular phone, but Garfinkel does not disclose where the cellular phone is located.

Fry discloses a portable information system for use with a bicycle (Fig. 1, 100), comprising: a mounting device or bicycle computer having at least one port (Fig. 2, 230), the mounting device adapted to connect to the bicycle (see Fig. 1; col. 3, lines 53-64); a portable computing device or portable laptop computer positionable in the at least one port, the portable computing device provides a digitized information (col. 3, lines 5-15; col. 5, lines 33-39).

Art Unit: 2645

Wherein, Fry further discloses the mounting device includes two ports, and the system further comprises: a GPS receiver inherently positionable in one of the two ports (Fig. 2, 210), the GPS receiver providing position data (col. 2, lines 45-58; col. 5, lines 19-23).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Garfinkel in view of Penza to include 2 ports, as per the teachings of Fry. One of ordinary skill in the art would have been lead to make such a modification since the portable entertainment system of Garfinkel in view of Penza can include a second port to enable another component, such as a cellular telephone, to provide a cellular telephone communication means positioned in the mounting device on the bicycle.

Regarding claim 7, the system of claim 1 mentioned above, wherein Garfinkel in view of Penza do not disclose the mounting device includes two ports, and the system further comprises: a wheel sensor providing wheel speed to the portable computing device.

Fry discloses a portable information system for use with a bicycle (Fig. 1, 100), comprising: a mounting device or bicycle computer having at least one port (Fig. 2, 230), the mounting device adapted to connect to the bicycle (see Fig. 1; col. 3, lines 53-64); a portable computing device or portable laptop computer positionable in the at least one port, the portable computing device provides a digitized information (col. 3, lines 5-15; col. 5, lines 33-39). Wherein, Fry further discloses the mounting device includes two ports, and the system further comprises: a wheel sensor (Fig. 2, 112) providing wheel speed to the portable computing device (col. 4, lines 7-10 and lines 18-36; col. 5, lines 33-39).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Garfinkel in view of Penza to include 2 ports, portable laptop

Art Unit: 2645

computer, and a wheel sensor, as per the teachings of Fry. One of ordinary skill in the art would have been lead to make such a modification since the portable entertainment system of Garfinkel in view of Penza can include a second port to enable another component, such as a wheel sensor, to provide wheel speed data to the user and the portable entertainment system of Garfinkel in view of Penza can include portable laptop computer to analyze data from the wheel sensor.

10. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Garfinkel as applied to claim 18 above.

Regarding claim 19, the helmet of claim 18 mentioned above, wherein Garfinkel further discloses the housing is positioned about a rear portion of the helmet (Fig. 1, 11; col. 5, lines 1-6).

Garfinkel does not disclose the housing is positioned about a front portion of the helmet.

Garfinkel discloses a front of the outer shell of the helmet comprises a headlight to illuminate dark areas in the user's field of vision (col. 1, lines 57-62; col. 2, lines 9-13). The housing comprising the electronics module is positioned along the rear portion of the outer shell because that is larger than the front portion in order to accommodate said module (col. 5, lines 1-6).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Garfinkel to include the housing is positioned about a front portion of the helmet to comprise the electronics module. One of ordinary skill in the art would have been lead to make such a modification if the helmet did not include a headlight to illuminate a user's vision.

Response to Arguments

11. Applicant's arguments, see Amendment, filed 7-15-2004, with respect to the rejection(s) of claim(s) 1-22 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made. Please see the rejections of claims 1-22 above.

12. Accordingly, this action is **NON-FINAL**.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- U.S. Patent No. 6,725,020 by Yagi a motorcycle helmet with incorporated communication system that is in communication with a control panel located on a motorcycle, wherein the control panel includes a radio with a mini-disk player, a cellular telephone, and a navigation system

14. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

Or faxed to:

(703) 872-9314 (for formal communications intended for entry)

Or call:

(703) 306-0377 (for customer service assistance)

Hand-delivered responses should be brought to: Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Art Unit: 2645

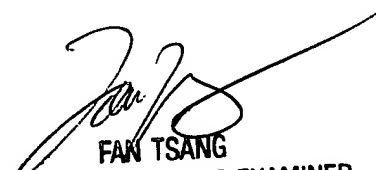
15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lisa Hashem whose telephone number is (703) 305-4302. The examiner can normally be reached on M-F 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on (703) 305-4895. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

LH

lh

March 19, 2005


FAN TSANG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600